



City of Santa Barbara Building & Safety Division Wall Bracing Requirements

Community Development
630 Garden Street
805-564-5485

When plans are submitted using the 2010 California **Residential** Code (CRC) and no engineering is provided, the following minimum requirements must appear on the submitted construction documents:

From **CRC Section R106.1.1** Information on construction documents: all braced wall lines shall be identified on the construction documents and all pertinent information including, but not limited to, bracing methods, location and length of braced wall panels, foundation requirements of braced wall panels at top and bottom shall be provided.

Please follow this format:

TABLE EXAMPLE

Wind Calculations

IRC Table R602.10.1.2(1) Footnotes	Numbered Wall Lines	Lettered Wall Lines
(b) Exposure Category	1.00	1.00
(c) Roof Eave-to-Ridge Height	0.94	0.94
(d) Wall Height	1.00	1.00
(e) Number of Braced Wall Lines	1.00	1.30
Wind Factor Total	0.94	1.22

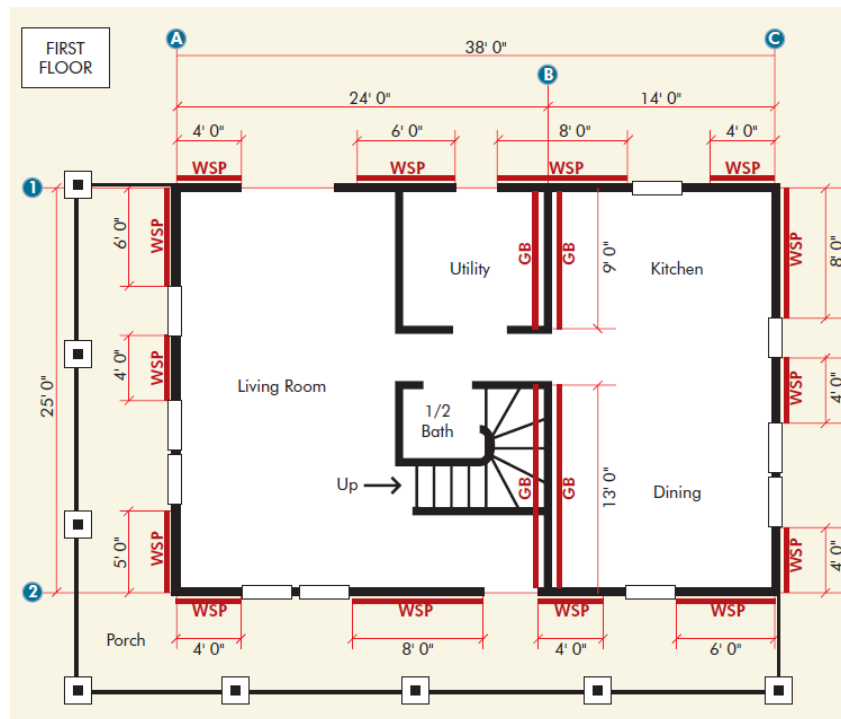
Braced Wall Line	Bracing Method	Braced Wall Line Spacing (ft)	Required Bracing (ft)	Wind Factor Total	Total Gypsum Factor	Panels with Hold Downs	Total Required Bracing Length (ft)	Bracing Length Provided (ft)	Status
1	WSP	25.00	8.00	0.94	n/a	n/a	7.52	22.00	Okay
2	WSP	25.00	8.00	0.94	n/a	n/a	7.52	22.00	Okay
A	WSP	24.00	7.70	1.22	n/a	n/a	9.39	15.00	Okay
B	GB	24.00	13.50	1.22	n/a	n/a	16.47	22.00	Okay
C	WSP	14.00	4.70	1.22	n/a	n/a	5.73	16.00	Okay

Seismic Calculations

Seismic Factors (IRC Table R602.10.1.2(3))	Adjustments
Story Height	1.00
Wall Dead Load	1.00
Roof/Ceiling Dead Load	1.00
Stone/Masonry in SDC C-D ₂	n/a
Cripple Wall	n/a
Seismic Factor Total	1.00

Braced Wall Line	Bracing Method	Braced Wall Line Length (ft)	Required Bracing (ft)	Braced Wall Line Spacing Factor	Seismic Factor Total	Total Required Bracing Length (ft)	Bracing Length Provided (ft)	Status
1	WSP	38.00	20.90	1.00	1.00	20.90	22.00	Okay
2	WSP	38.00	20.90	1.00	1.00	20.90	22.00	Okay
A	WSP	25.00	13.75	1.00	1.00	13.75	15.00	Okay
B	GB	25.00	18.75	1.00	1.00	18.75	22.00	Okay
C	WSP	25.00	13.75	1.00	1.00	13.75	16.00	Okay

GRID LAYOUT EXAMPLE



A grid shall be provided on the plans using Letters and Numbers as shown above.

A table shall be provided as shown above referencing the braced wall line showing adjustment factors, required braced wall lengths and bracing wall lengths provided for each referenced grid line.

The above plan and table shall be provided for each floor and for cripple walls if applicable.